NORTH CAROLINA DIVISION OF AIR QUALITY

Application Review

Issue Date: TBD

Region: Washington Regional Office

County: Chowan NC Facility ID: 2100073

Inspector's Name: Yongcheng Chen **Date of Last Inspection:** 06/11/2019

Compliance Code: 3 / Compliance - inspection

Facility Data

Applicant (Facility's Name): Regulator Marine, Inc.

Facility Address:Regulator Marine, Inc.
187 Peanut Drive
Edenton, NC 27932

SIC: 3732 / Boat Building And Repairing **NAICS:** 336612 / Boat Building

Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V

Permit Applicability (this application only)

SIP: 02D: .0515, .0516, .0521, .1111, .1806

02Q: .0317

NSPS: n/a

NESHAP: VVVV, ZZZZ

PSD: n/a

PSD Avoidance: VOC

NC Toxics: n/a 112(r): n/a Other: n/a

Contact Data

Facility Contact Technical Contact Authorized Contact Michael Aust Michael Aust Michael Aust Manager - Env., Health & Manager - Env., Health & Manager - Env., Health & Safety Safety Safety (252) 482-3837 (252) 482-3837 (252) 482-3837 187 Peanut Drive 187 Peanut Drive 187 Peanut Drive Edenton, NC 27932 Edenton, NC 27932 Edenton, NC 27932

Application Data

Application Number: 2100073.19A **Date Received:** 02/11/2019

Application Type: Renewal **Application Schedule:** TV-Renewal

Existing Permit Data
Existing Permit Number: 07132/T12
Existing Permit Issue Date: 11/26/2018
Existing Permit Expiration Date: 08/31/2019

Total Actual emissions in TONS/YEAR:

CY	SO2	NOX	VOC	co	PM10	Total HAP	Largest HAP
2017	ļ	1.12	54.89	0.4700	0.8600	54.23	46.18 [Styrene]
2016		0.8700	48.68	0.3700	0.6700	48.25	41.42 [Styrene]
2015		0.9700	40.07	0.4100	0.5800	39.70	33.82 [Styrene]
2014		0.7500	44.58	0.3200	0.6500	44.52	37.42 [Styrene]
2013	0.0100	1.32	33.01	0.2800	0.5200	32.85	27.47 [Styrene]

Review Engineer: Russell Braswell Comments / Recommendations:

Review Engineer's Signature: Date: Issue 07132/T13
Permit Issue Date: TBD

Permit Expiration Date: TBD+5 years

1. Purpose of Application:

Regulator Marine, Inc. ("RMI") currently operates a facility in Chowan County, North Carolina, under Title V permit 07132T12. The existing Title V permit is set to expire on August 31, 2019. RMI submitted this permit application in order to renew the existing Title V permit without modification. Because the application was submitted at least six months before the expiration date, the existing permit will remain in effect, regardless of expiration date, until this application is processed.

2. Facility Description:

According to the most recent inspection report (Yongcheng Chen, June 11, 2019), this facility manufactures fiberglass boats in open molds. Boats range in size from 23 to 41 feet long, and construction time is up to 10 days per boat. The facility has approximately 245 full-time employees.

3. History/Background Since the Previous Permit Renewal:

- September 16, 2014 Permit T11 issued. This action renewed the Title V permit.
- November 26, 2018 Permit T12 issued. This application was for a TV-Minor modification that increased the physical size of buildings at the facility, thereby increasing overall production rate at the facility. In addition, this action removed TAP emission limits from the permit as allowed by Session Law 2012-91.

4. Application Chronology:

- February 11, 2019 Application received in Regional Office.
- July 24, 2019 Application received in Raleigh Central Office.
- August 30, 2019 An initial draft of the permit and application review were sent to DAQ staff (Tom Anderson, Mark Cuilla, Samir Parekh, Yongcheng Chen) and RMI staff (Gary Yoder, Mike Aust). Only one comment was received, pointing out minor typos in the drafts.
- XXXXX
 Public / EPA notice
- XXXXX Permit issued.

5. Regulatory Overview:

RMI is subject to the following State Implementation Plan (SIP) and Federal regulations, in addition to the requirements in the General Conditions:

- 15A NCAC 02D .0515 "Particulates from Miscellaneous Industrial Processes"
- 15A NCAC 02D .0516 "Sulfur Dioxide from Combustion Sources"
- 15A NCAC 02D .0521 "Control of Visible Emissions"
- 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (40 CFR Part 63, Subparts VVVV, ZZZZ)
- 15A NCAC 02D .1806 "Control and Prohibition of Odorous Emissions"

15A NCAC 02Q .0317 "Avoidance Conditions" (PSD Avoidance)

See below for a review of rules included (or excluded) in the Title V permit. The permit will be updated to reflect the most current stipulations for all applicable regulations.

a. 02D .0515 "Particulates from Miscellaneous Industrial Processes"

This rule applies to sources that emit particulates and are not subject to a different specific particulate emission limit. The boat manufacturing buildings (ES-1 and ES-2) are subject to this rule.

The rule limits particulate emissions based on the process rate of the specific sources. In order to demonstrate compliance, RMI will operate particulate control devices on both boat manufacturing buildings. RMI must perform regular inspections and maintenance on the filters and keep records of those actions. RMI must submit a report of all records twice per year.

RMI was determined to be in compliance with this rule during the most recent inspection of the facility. Continued compliance will be determined with subsequent inspections and reports.

b. 02D .0516 "Sulfur Dioxide from Combustion Sources"

This rule applies to sources that emit sulfur dioxide (" SO_2 ") and are not subject to a different specific SO_2 emission limit. The peak-shaving generator (ES-I4) is subject to this rule.

The generator only burns diesel fuel. Based on emission factors taken from US EPA's AP-42, diesel fuel complies with the SO_2 limit by default. No monitoring, recordkeeping, or reporting is required for RMI to demonstrate compliance with this rule.

c. 02D .0521 "Control of Visible Emissions"

This rule applies to sources with visible emissions ("VE") that are not subject to a different a different VE standard.

Each source at this facility is limited to 20% opacity. RMI must perform regular observations to ensure that VE opacity does not exceed this limit and keep records of those observations. Records must be reported twice per year.

RMI was determined to be in compliance with this rule during the most recent inspection of the facility. Continued compliance will be determined with subsequent inspections and reports.

d. 02D .1111 "Maximum Achievable Control Technology" ("MACT")

This rule incorporates into NC's SIP each of the Federal rules found under 40 CFR Part 63. For this facility, those rules that apply are Subparts VVVV and ZZZZ. For the purposes of applicability under 40 CFR Part 63, this facility a Major Source of hazardous air pollutants ("HAP").

1. 40 CFR Part 63, Subpart VVVV: "Boat Manufacturing"

This rule applies to facilities that manufacture fiberglass or aluminum recreational boats and are also Major Sources of HAP. RMI manufactures fiberglass boats and is a Major Source, so this rule applies.

The rule limits HAP emissions from different parts of the boat building process. The rule has several different compliance options; in general, RMI complies with the emission limits using the "compliant materials" option. RMI must calculate HAP content and HAP emissions using the equations provided in the rule and compare them to the limits listed in the rule. RMI must keep records of material usage and calculations to demonstrate compliance with the rule. RMI must submit reports of recordkeeping twice per year.

RMI was determined to be in compliance with this rule during the most recent inspection of the facility. Continued compliance will be determined with subsequent inspections and reports.

2. 40 CFR Part 63, Subpart ZZZZ: "Stationary Reciprocating Internal Combustion Engines"

This rule applies to all stationary reciprocating engines. The requirements of the rule change based on several aspects of each individual engine, such as: the classification of the facility (i.e. Major/Minor), the size of the engine, and the use of the engine.

This facility has one subject engine (ES-I4). For the purposes of this rule, the engine is:

- o Existing:
- o Greater than 500 horsepower;
- Located at a Major Source;
- o Non-emergency use;
- Compression ignition; and
- o Controlled using a catalyst.

In order to demonstrate compliance with this rule, RMI must reduce carbon monoxide ("CO") emissions from the engine using a catalyst. RMI must operate the catalyst within the accepted temperature and pressure drop ranges, minimize startup/shutdown/idle times, and conduct an initial and semiannual performance test. RMI must keep records of testing, monitoring, and maintenance activities, and submit a report of recordkeeping twice per year.

RMI was determined to be in compliance with this rule during the most recent inspection of the facility. Continued compliance will be determined with subsequent inspections and reports.

e. 02D .1806 "Control and Prohibition of Odorous Emissions" (State-enforceable only)

This rule requires that facilities not cause odorous emissions beyond the property boundary that contribute to odor complaints. This rule is not part of North Carolina's State Implementation Plan, and is therefore State-enforceable only.

RMI has no specific requirements for this rule included in the permit. During the most recent inspection, no objectionable odors were detected outside of the property boundary. Continued compliance will be determined during subsequent inspections.

f. 02Q .0317 "Avoidance Conditions"

This rule allows facilities to accept Federally-enforceable limits in the Title V permit in order to avoid triggering requirements of certain rules. RMI has accepted a facility-wide limit on volatile organic compounds ("VOC") emissions in order to avoid applicability of 02D .0530 "Prevention of Significant Deterioration" ("PSD"). The limit is 250 tons per year. As long as RMI complies with this limit, the

facility will be a Minor Source for PSD, and thus not subject to 02D .0530. This limit has been included in the Title V permit since before the T05 permit revision (issued November 1, 2001).

In order to demonstrate compliance with the limit, RMI calculates facility-wide VOC emissions using emission factors contained in the permit. The calculation is made monthly and reported twice per year.

RMI was determined to be in compliance with this rule during the most recent inspection of the facility. Continued compliance will be determined with subsequent inspections and reports.

g. Nonapplicable Rules

There are several rules that could potentially apply to this facility, but do not.

1. 40 CFR Part 63, Subparts NN, NNN, and HHHH

These rules are related to fiberglass manufacturing, but only apply to facilities that are Area Sources of HAP (i.e. not Major Sources). RMI is a Major Source, and therefore these rules do not apply to this facility.

2. 02D .0524 "New Source Performance Standards" (and 40 CFR Part 60, Subpart IIII)

This rule applies to compression-ignition stationary internal combustion engines manufactured after April 2006. The engine at this facility (ES-I4) was installed before that date, and therefore this rule does not apply.

3. 02D .0614 "Compliance Assurance Monitoring" (and 40 CFR Part 64)

CAM applies to a control device if the following criteria are met:

- The unit being controlled is subject to a non-exempt emission standard (as defined by 02D .0614(b)(1)).
- o The control device is being used to comply with the emission standard, and
- The unit being controlled has potential emissions of the pollutant subject to the emission standard of greater than major source thresholds.

RMI uses fabric filter and catalyst control devices.

The fabric filters (CD-1 and CD-6) are used to control particulate emissions, but do not control sources with potential particulate emissions greater than major source thresholds. Therefore, CAM does not apply to these control devices.

The catalyst (CD-I4) is used to control CO and HAP emissions. The associated emission standard is 40 CFR Part 63, Subpart ZZZZ, which is an exempt standard per 02D .0614(b)(1). Therefore, CAM does not apply to this control device.

4. 02D .0900 "Volatile Organic Compounds" and 02D .1400 "Nitrogen Oxides" (a.k.a. "Reasonably Available Control Technology", "RACT")

These rules only apply to sources located in current or former areas of ozone nonattainment. Chowan County is not one of these areas, so these rules do not apply

5. 02D .1100 "Control of Toxic Air Pollutants" and 02Q .0711 "Emission Rates Requiring a Permit"

This facility has previously performed air dispersion modeling for toxic air pollutants ("TAPs") in order to demonstrate compliance with the acceptable ambient limits listed in 02D .1104. However, all TAP emission limits were removed from the permit with the T12 permit revision (issued November 26, 2018), as allowed by Session Law 2012-91.

All permitted emission sources at this facility are subject to a rule under 40 CFR Part 63. Therefore, these sources are exempt from TAP emission requirements per 02Q .0702(a)(27).

6. Section 112(r) of the Clean Air Act

This facility does not appear to store any of the materials listed in 40 CFR 68.130 above their respective thresholds. Therefore, this facility does not have any increased requirements under the Risk Management Plan.

6. Facility Emissions Review

This permit renewal is not expected to change potential emissions from the facility.

For a historical review of actual emissions from the facility, see the summary table on the first page of this review.

7. Compliance Status

a. Notices of Violation/Recommendation for Enforcement since the previous renewal

March 31, 2017 NOV issued to the facility for late submittal of the semiannual compliance report for 40 CFR Part 63, Subpart VVVV. No enforcement action was taken, and the issue was resolved on April 4, 2017.

b. Inspection status

The facility was most recently inspected by Yongcheng Chen on June 11, 2019. RMI appeared to be in compliance with the Title V permit at the time of that inspection.

8. Other Regulatory Concerns

A PE seal was not required for this permit renewal.

A zoning consistency form was not required for this permit renewal.

9. Public Notice/EPA and Affected State(s) Review

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Consistent with 15A NCAC 02Q .0525, the EPA will have a concurrent 45-day review period. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit shall be provided to EPA. Also, pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice is provided to the public under 02Q .0521 above.

10. Recommendations

TBD



Attachment 1 to review of application 2100073.19A Regulator Marine, Inc.

Change List

The following changes were made to the Regulator Marine, Inc. Title V Permit No. 07132T12:

Page(s)*	Section*	Description of Change(s)
Throughout	Throughout	 Updated dates/permit numbers. Fixed formatting. Updated authorized contact.
3	1.	Removed references to minor modifications because all applicable dates have passed.
6	2.1 A.3	 Updated formatting of MACT 4V condition to match DAQ standard. Renumbered equations such that each has a unique number. Removed duplicate tables. (these changes are only for clarity, and do not reflect a change in compliance requirements for this facility)
20 • Noted that the Permittee has comple for MACT 4Z.		Trotted that the Fernittee has completed the initial compliance demonstration

^{*} This refers to the current permit unless otherwise stated.